

(a) dual molecules constituted by covalent coupling of a functional amino acid arm, ensuring binding to a target, with a genetic ribonucleic acid arm corresponding to the coded description of the composition of said functional amino acid arm; and

(b) bacterial membrane fractions containing glycopeptides and/or lipopolysaccharides,

said ribonucleic acid arm being of ribosomal origin being extracted from bacteria selected from the group consisting of *Helicobacter pylori*, *Helicobacter hepaticus*, *Helicobacter coronari*, or mixtures thereof.

13. (Amended) The immunomodulatory and vaccine complex according to one of claims 9-11 for use as an anti-idiotypic vaccine against the idiotypic of anti-*Helicobacter sp.* antibodies which make it possible to avoid recidivations of the initial digestive tract pathology caused by *Helicobacter sp.*

14. (Amended) The immunomodulatory and vaccine complex according to one of claims 9-11 for use against antibiotic-resistant *Helicobacter sp.* bacteria which are resistant to conventional treatments.

15. (Amended) The immunomodulatory and vaccine complex according to one of claims 9-11 wherein said complex is formulated to enable the simultaneous administration of said complex together with substances selected from the group consisting of corticosteroids, antibiotics, antisecretory agents such as

proton pump inhibitors, products with bacteriostatic effect, and products with bactericidal effect.

16. (Amended) The immunomodulatory and vaccine complex according to claim 15 wherein said complex is formulated to enable the administration of said complex by a route selected from the group consisting of intravenous route, transdermal route and per os.

ADD
E2